Amendments to the Claims:

This listing of Claims will replace all prior versions and listings of Claims in the Application.

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Listing of Claims:

Please Amend the Claims as Follows:

Claim 1 (currently amended): A focal plane array (FPA) camera comprising:

- **(I)** a tunable voltage source adapted to supply a positive bias voltage and a negative bias voltage, the voltage source comprising:
 - (IA) a positive terminal; and
 - (IB) a negative terminal;
- (Π) a top contact coupled to the positive terminal of the voltage source;
- (III)a bottom contact coupled to the negative terminal of the voltage source;
- a substantially-transparent substrate coupled to the bottom contact, the substantially-(IV) transparent substrate being adapted to admit light; and
- (V) a matrix of detectors, each detector comprising:
 - (VA) a top surface coupled to the top contact;
 - (VB) a bottom surface coupled to the substantially-transparent substrate, the bottom surface being substantially parallel to the top surface;
 - (VC) side surfaces extending from the top surface to the bottom surface, each side surface being substantially non-parallel to an opposing side surface; and

- (VD) first-wavelength quantum-well infrared photodetector (QWIP) elements, each first-wavelength QWIP element being adapted to detect energy at a first range of wavelengths when the voltage source supplies the positive bias; and
- (VE) second-wavelength QWIP elements, each second-wavelength QWIP element being adapted to detect energy at a second range of wavelengths when the voltage source supplies the negative bias, the second range of wavelengths being different from the first range of wavelengths.

Claim 2 (original). The camera of claim 1:

wherein each first-wavelength QWIP element is a first quantum well adapted to detect energy at a first wavelength;

wherein each second-wavelength QWIP element is a second quantum well adapted to detect energy at a second wavelength; and

wherein the first quantum well and the second quantum well are separated by a blocking barrier.

Claim 3 (original). The camera of claim 1:

wherein each first-wavelength QWIP element is a first superlattice of quantum wells; and

wherein each second-wavelength QWIP element is a second superlattice of quantum wells.

Claim 4 (currently amended). A multi-wavelength detector system comprising:

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- **(I)** a focal plane array (FPA) camera comprising:
 - (IA) a tunable voltage source adapted to supply a first bias voltage, the voltage source further being adapted to supply a second bias voltage:
 - (IB) first-wavelength detectors coupled to the tunable voltage source, the firstwavelength detectors having non-parallel sides, the first-wavelength detectors being adapted to detect energy at a first range of wavelengths when the tunable voltage source supplies the first bias voltage, the first-wavelength detectors further being adapted to generate photocurrents proportional to the detected energy at the first range of wavelengths; and
 - (IC) second-wavelength detectors being coupled to the tunable voltage source, the second-wavelength detectors having non-parallel sides, the second-wavelength detectors being adapted to detect a second range of wavelengths when the tunable voltage source supplies the second bias voltage, the secondwavelength detectors further being adapted to generate photocurrents proportional to the detected energy at the second range of wavelengths; and
- (II)a processor coupled to the FPA camera, the processor being configured to generate a first-wavelength two-dimensional image, the first-wavelength two-dimensional image being generated from the photocurrents proportional to the detected energy at the first range of wavelengths, the processor further being configured to generate a secondwavelength two-dimensional image, the second-wavelength two-dimensional image

being generated from the photocurrents proportional to the detected energy at the second range of wavelengths.

Claim 5 (original). The system of claim 4, further comprising:

a display adapted to display the first-wavelength two-dimensional image, the display further being adapted to display the second-wavelength two-dimensional image.

Claim 6 (original). The system of claim 5, wherein the display is further adapted to substantially concurrently display the first-wavelength two-dimensional image and the second-wavelength two-dimensional image.

Claim 7 (currently amended). A detector comprising:

- a first contact;
- a second contact;
- a substantially-transparent substrate coupled to the second contact, the substantially-transparent substrate being configured to admit light;
- a <u>tunable</u> voltage source electrically coupled to the first contact and the second contact, the <u>tunable</u> voltage source being adapted to supply a first bias voltage between the first contact and the second contact, the <u>tunable</u> voltage source further being adapted to supply a second bias voltage between the first contact and the second contact;

a top coupled to the first contact;

a bottom coupled to the substantially-transparent substrate, the bottom adapted to receive the light admitted through the substantially-transparent substrate;

sides extending from the top to the bottom, each side being substantially nonperpendicular to the bottom, each side being adapted to redirect the admitted light;

a first-wavelength quantum-well infrared photodetector (QWIP) element adapted to detect energy proportional to a first range of wavelengths when the <u>tumable</u> voltage source supplies the first bias voltage; and

a second-wavelength QWIP element adapted to detect energy proportional to a second range of wavelengths when the tunable voltage source supplies the second bias voltage.

Claim 8 (original). The detector of claim 7:

wherein the first contact is a metal contact; and wherein the second contact is a metal contact.

Claim 9 (original). The detector of claim 7, wherein each side is substantially non-parallel to an opposing side.

Claim 10 (original). The detector of claim 7:

wherein each first-wavelength QWIP element is a first quantum well adapted to detect energy at a first wavelength;

wherein each second-wavelength QWIP element is a second quantum well adapted to detect energy at a second wavelength; and

wherein the first quantum well and the second quantum well are separated by a blocking barrier.

Claim 11 (currently amended). The detector of claim 7:

wherein each first-wavelength QWIP element is a first superlattice of quantum wells, the first superlattice of quantum wells being adapted to detect energy at a first range of wavelengths; and

wherein each second-wavelength QWIP element is a second superlattice of quantum wells, the second superlattice of quantum wells being adapted to detect energy at a second range of wavelengths. Wavelengths; and

wherein an energy relaxation layer is interposed between the first superlattice of quantum wells and the second superlattice of quantum wells.

Claim 12 (original). A voltage-tunable multi-color infrared (IR) detector element comprising: a substantially-planar surface adapted to admit light; and

means for redirecting the admitted light.

Claim 13 (original). A voltage-tunable multi-color infrared (IR) detector element comprising:

a substantially-planar surface adapted to admit light; and

sides extending from the substantially-planar surface, each side being substantially non-perpendicular to the substantially-planar surface, each side being adapted to redirect the light admitted through the substantially-planar surface.

Claim 14 (original). The detector element of claim 13, wherein each side is substantially non-parallel to an opposing side.

Claim 15 (original). The detector element of claim 13, wherein each voltage-tunable multicolor IR detector comprises:

a first superlattice of quantum wells, the first superlattice being adapted to detect energy at a first range of wavelengths; and

a second superlattice of quantum wells, the second superlattice being adapted to detect energy at a second range of wavelengths.

Claim 16 (original). The detector element of claim 13, wherein each voltage-tunable multicolor IR detector comprises:

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a first quantum well adapted to detect energy at a first wavelength; and a second quantum well adapted to detect energy at a second wavelength.

Claim 17 (original). A light-detection method comprising the steps of:

receiving incident radiation;

reflecting the incident radiation at an angled surface; and

directing the reflected radiation through a voltage-tunable multi-color infrared (IR) detector element.

Claim 18 (original). The method of claim 17, further comprising the step of:

supplying a first bias voltage to the voltage-tunable multi-color IR detector element to detect energy at a first range of wavelengths.

Claim 19 (original). The method of claim 18, further comprising the step of:

generating a first-wavelength image, the first-wavelength image being generated from the detected energy at the first range of wavelengths.

Claim 20 (original). The method of claim 18, further comprising the step of:

supplying a second bias voltage to the voltage-tunable multi-color IR detector element to detect energy at a second range of wavelengths.

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Claim 21 (original). The method of claim 20, further comprising the step of:

generating a first-wavelength image, the first-wavelength image being generated from the detected energy at the first range of wavelengths; and

generating a second-wavelength image, the second-wavelength image being generated from the detected energy at the second range of wavelengths.